## A living snail in a faecal pellet of the green toad

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A juvenile Monacha obstructa (Pfr.) was found alive in a faecal pellet of a green toad (Bufo viridis) not far from Ramla, Israel.

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The green toad (Bufo viridis Laurenti, 1768) is considered a common predator of terrestrial snails and slugs (Amitai, 1980). Yet, the only data on actual cases of predation on snails in Israel are those published by Mienis (1987), who recorded the presence of remains of six species of land snails in faecal pellets of these toads caught in Kibbutz Netzer Sereni.

On 8 February 1993 a green toad was caught near the 'Nesher-Ramla' water reservoir, 3 km ESE. of Ramla. Almost immediately it produced a faecal pellet. A check of its contents revealed the remains of several lumbricid worms, an earwig [Labidura riparia (Pallas, 1773)], a small carabid beetle, a spider, and a tiny land snail. This turned out to be a juvenile of Monacha obstructa (Pfeiffer, 1842) with a shell diameter of 2.1 mm. To my surprise the snail was still alive and started to crawl around as soon as it was released from the adhering faeces.

Cadée (1988) obtained living *Peringia ulvae* (Pennant, 1774) from faeces of shelduck [*Tadorna tadorna* (Linnaeus, 1758)] and referred e.g. to literature dealing with the role birds play in the dispersal of plants.

Although green toads are certainly more mobile than snails, it is doubtful whether they play any role in the dispersal of certain land snails. The instances that snails survive the long passage through the digestive tract of toads are probably few and far between. Moreover, green toads never go far afield and usually return to the same hide-out, where most of the defecating takes place.

Monacha obstracta should be added to the list of land snails preyed upon by the green toad in Israel.

## REFERENCES

AMITAI, P., 1980. Snails. — Alon le Morch HaBiologiah 77: 28-34 (in Hebrew).

CADÉE, G.C., 1988. Levende wadslakjes in bergeend facces. — Corr.Bl. Ned. Malac. Ver. 243-244: 443-444.

MIENIS, H.K., 1987. Predation on snails by the Green Toad: Bufo viridis, in Kibbutz Netzer Sereni, Israel. —

Levantina 67: 707-708.